

# Chelmsford Amateur Radio Society.

NEWSLETTER No.306

Callsign G0MWT

July 1991

## NEXT MEETING - Amateur Satellite Communication.

This month we are very pleased to welcome Pat Gowen, G3IOR who will inform us on some of the remarkable results that have been achieved since the first Orbiting Satellite Carrying Amateur Radio (OSCAR) was launched in 1961.

Pat is one of the loyal team who support all the background work that is necessary to keep satellites operational so that amateurs in general can use and enjoy them.

The meeting will include a video and we can look forward to an informative evening.

The meeting starts at 7.30pm at The Marconi College, Arbour Lane, Chelmsford.

## DATES FOR YOUR DIARY.

- 2 July CLUB MEETING - "Amateur Satellites" by Pat Gowen G3IOR.
- 14 July DF EVENT - RSGB Qualifier - Banbury.
- 19 July DF EVENT - Chelmsford, start at Tiptree Heath.
- 21 July COLCHESTER R/A MOBILE RALLY - Highwoods Sports Centre.
- 6 Aug. CLUB MEETING - General Discussion Evening.
- 18 Aug. RADIO GARDEN PARTY - Hosted by Pauline and John, G8DET.

## QSL CARD UP-DATE.

With grateful thanks to Peter DK7SP we now have a block of QSL's to use in reply to those received for the various events where G0MWT has been on the air.

As we outlined at the last club meeting, having some sponsored cards gives us more time to get our act together in producing a design from the QSL Card Competition as proposed in the May Newsletter, so let's have some outline designs as a basis of discussion for the August Meeting.

## NFD 1991 - Gwyn G4FKH.

G0MWT/P did quite well this year with 561 valid contacts providing the total of 2669 points. We will not win any prizes because other stations were logged with their serial numbers up in the high 900's, nevertheless it was a very pleasant way to spend the weekend. The weather was very kind to us, as were the people who provided cakes etc.

On Saturday morning there was a good turnout of members on site at 9.00 am to ensure that we had an early start. The station was ready for operation by 12.30, although we played around with the aerials until 15.45. An incident occurred when Andrew came into the operating tent to take a photograph of Dick and myself tuning the aerials. He used a flash light, I thought it was an ATU flashing over and jumped, Dick thought it was the rig blowing up and was heard to utter unprintable words (a very unusual occurrence).

The clubs new rig worked very well indeed, further confirmation that we have made a good investment.

As I have already mentioned this was a very nice weekend, with plenty of visitors. The Essex Chronicle sent along a photographer on Sunday morning, so keep hold of the 6th June issue for posterity.

The station was being taken apart as I finished the last QSO and everyone was away from the site by 5.00 pm. As I write this a week or so later the checklogs are being handed to Dick for submission to the RSGB adjudicators, the work does not finish on the same day as the contest.

Thanks to everyone who helped, we now start planning next years event. EEK!

## DF NEWS - Slade Qualifying Event 9th June - Dick G3WHR.

The team rendezvous with Mike and Paul was successfully accomplished and at 1 pm we joined the other competitors at the start, south of Kidderminster.

Both stations were heard giving bearings to the SW and NW. The southern station gave the least chance of error so we set off for Station A.

Quick work in obtaining two bearings on the third transmission pinpointed a site on the edge of a quarry, where we found an aerial and two other teams. Brian Bristow was first "in" but I had also followed the aerial and was close behind. While I was being signed in I was spotted, form in hand, by Mike Hawkins.

Back to the car for the journey north. My bearings so far crossed 12m from the start but further bearings disagreed - it was a bad start bearing. The road layout made it difficult to obtain a cross bearing, but en route we saw both Mike and Brian having similar problems. Finally I decided to drive away to one side - this worked and we obtained a good cross near Bridgeworth.

During our run in, the Tx operator revealed that someone had found both stations so 1st place had already gone - only two qualify! Skilled bush beating by Mike and Paul found the Tx and we knew that we were 2nd to find stations A, B.

At tea we heard the results, Mike Hawkins had won and I was second, a 1,2 for Chelmsford. Mike had already qualified by winning last years final so Brian Bristow and I will join him in this years final.

## COMMITTEE MEETING.

The July Committee will be held in the Telford Lodge (Marconi College Residence) at 7:30pm on Wednesday, 10th July, you are most welcome to join us.

## LAST MONTHS MEETING - John G0NVM.

This years constructors' competition proved yet again to be a most enjoyable evening. A total of seven entries were put forward - all of which appeared to be potential winners. Each item was briefly described and/or demonstrated by their owner before being more closely examined by the judges.

First prize went to George, G0LKY for his H.F. Forward/Reverse Power Meter which he modified from the published design to include a remote head which connects to the power meter via an umbilical cord; this positions the power measurement where it is actually needed, at the transmitter output connector, a move that also cured problems he came across on the original design which affected calibration of the meter. An excellent result for George following last years performance when he took second prize for his bench type keyer.

Second prize went to Richard, G4ICP for his 160M AM/CW D.F. transmitter. At first sight, the transmitter greatly resembled a Pye Cambridge - right down to the serial number plate! Fortunately we were soon put straight on this matter. The Pye Cambridge had been almost completely gutted bar the inverter circuit, the chassis panel lowered and a crystal controlled valve transmitter taken from an article by F.G.Rayer (Practical Wireless 1966) installed inside. Interestingly the set was built from nearly all re-cycled parts, including the QQV03/10 output device which provides a healthy 5-6watts of R.F. - well done Richard, keep it green!

Third prize went to John, G8DET for his Capacitance and Resistance boxes both of which would find a use in any budding constructors shack. Ideal no doubt for finding that component value you need to get your project working!

The Novice prize went to John, G0LSY for his 2 element 2 metre quad antenna built from thin copper wire around a light wooden frame. The antenna has a 7db gain over a reference dipole. The driven element consists of a one wavelength loop separated from the reflector by half a wavelength thus bringing the impedance down to 70 Ohms. A sophisticated arrangement using 15mm outside diameter copper pipe is used to house the unbalanced to balanced matching section which itself has a useful operating bandwidth of between 120-220MHz. Well that puts John in the open section for next year now.

Other entries included:-

Gwyn, G4FKH with his 13.5V P.S.U. built around the popular 723 IC. from the Powermate II article - RadComm April 1989.

Don, G0LLA with his Line Matching Unit with built in Power Meter Reflectometer, taken from a Technical Topics article.

Roy, G3PMX with his Remote Switch to 3.5mm Jack Socket - built into a 35mm film container - perhaps the most original of all the entries; ideal for P.T.T. switching, etc.

Much enthusiasm was generated throughout the meeting with a great deal of exchanging of ideas taking place; someone suggested that there should have been a special prize for Fred, G2HNF! So come on all you budding constructors, let's make a start on all those projects for next year.

Many thanks to our two Judges, Andrew, G4KQE and Harry, G2HPF for their hard work on deciding the winners.

73 from Roy & Ela Martyr, G3PMX & G6HKM

Telephone, Home (0245) 360545  
or Office (0245) 353221 Ex.3815

1, High Houses,  
Mashbury Road,  
Great Waltham,  
CM3 1EL.

## MEMBERS ADVERTISEMENTS

### FOR SALE.

WATCH THIS SPACE - The Newsletter publishing office is about to be updated with a PC, so there should be some very interesting computing and peripheral equipment for resale, plus a Dragon or two (no not Ela!).